

a suppressor arranged in an optical path of the optical apparatus to suppress the wavelength dependence in a predetermined wavelength band,

wherein the suppressor has a reflectance characteristic of increasing reflectance on a short wavelength side of a working wavelength region and decreasing reflectance on a long wavelength side of the working wavelength region, and light rays incident on the optical surface include normal incident rays and oblique incident rays.

2. (ONCE AMENDED) The optical apparatus according to claim 1, wherein the suppressor is formed on another optical surface different from the optical surface in the optical apparatus.

3. (ONCE AMENDED) The optical apparatus according to claim 2, wherein the suppressor is a thin film laid on the other optical surface.

4. (ONCE AMENDED) The optical apparatus according to claim 1, wherein the optical characteristic of the thin film is one of reflectance and transmittance.

6. (ONCE AMENDED) The optical apparatus according to claim 1, wherein the wavelength characteristic of the reflectance of the suppressor has a first region in which the first derivative of the wavelength characteristic is positive on the short wavelength side of the working wavelength region, and a second region in which the second derivative of the wavelength characteristic is negative on the longer wavelength side of the first region.

7. (ONCE AMENDED) The optical apparatus according to claim 6, wherein the predetermined wavelength band is defined between the first region and the second region.

9. (ONCE AMENDED) An exposure apparatus for transferring a predetermined pattern, formed on a mask under illumination, onto a workpiece, the exposure apparatus comprising the optical apparatus of claim 1.

10. (ONCE AMENDED) The exposure apparatus according to claim 9, further comprising a light source for supplying illumination light,

wherein the light source supplies the illumination light including at least two bright lines, and

wherein the at least two bright lines are in the predetermined wavelength band.

11. (ONCE AMENDED) The exposure apparatus according to claim 9, further comprising an illumination optical system for illuminating the mask, based on illumination light from a light source, and a projection optical system for forming an image of the pattern of the mask on the workpiece,

wherein the suppressor is provided in at least one of the illumination optical system and the projection optical system.

12. (ONCE AMENDED) An exposure method of transferring a predetermined pattern formed on a mask onto a workpiece, using the exposure apparatus of claim 9.

13. (ONCE AMENDED) An exposure apparatus for transferring a predetermined pattern, formed on a mask under illumination, onto a workpiece, comprising:

a light source;

an illumination optical system arranged in an optical path between the light source and the mask;

a projection optical system arranged in an optical path between the mask and the workpiece;

a thin film having an optical characteristic of wavelength dependence, the thin film being formed on an optical surface arranged in at least one of the optical paths; and

a suppressor, arranged in at least one of the optical paths, to suppress the wavelength dependence in a predetermined wavelength range.

14. (ONCE AMENDED) The exposure apparatus according to claim 13, wherein the suppressor is formed on another optical surface different from the optical surface in the at least one of the optical paths.

15. (ONCE AMENDED) The exposure apparatus according to claim 14, wherein the suppressor is a thin film laid on the other optical surface.

16. (ONCE AMENDED) The exposure apparatus according to claim 15, wherein the optical characteristic of the thin film is one of reflectance and transmittance.

17. (ONCE AMENDED) The exposure apparatus according to claim 13, wherein the predetermined wavelength range includes a wavelength of an illumination light.

18. (ONCE AMENDED) An exposure method of transferring a predetermined pattern, formed on a mask under illumination, onto a workpiece, comprising:

providing a light from a light source; illuminating the mask with the light from the light source;

projecting the pattern on the mask onto the workpiece;

passing the light through a thin film with an optical characteristic having wavelength dependence; and

passing the light through a suppressor,

wherein the thin film is formed on an optical surface in an optical path between the light source and the workpiece, and

wherein the suppressor suppresses the wavelength dependence in a predetermined wavelength range.

19. (ONCE AMENDED) The method according to claim 18, wherein the predetermined wavelength range includes a wavelength of an illumination light.

20. (ONCE AMENDED) The method according to claim 18, wherein the optical characteristic of the thin film is one of reflectance and transmittance.

Please ADD new claims 21-27 as follows:

21. (NEW) An optical apparatus, comprising:
a curved optical surface;

a thin film with an optical characteristic having wavelength dependence, the thin film being formed on the curved optical surface; and

a suppressor arranged in an optical path of the optical apparatus, the suppressor suppressing the wavelength dependence in a predetermined wavelength band.

22. (NEW) The optical apparatus according to claim 21, wherein the suppressor is formed on another optical surface different from the curved optical surface in the optical apparatus.

23. (NEW) The optical apparatus according to claim 22, wherein the other optical surface has a curved optical surface.

24. (NEW) The optical apparatus according to claim 23, wherein the suppressor is a thin film laid on the other optical surface.

25. (NEW) The optical apparatus according to claim 24, wherein the optical characteristic of the thin film is one of reflectance and transmittance.

26. (NEW) An exposure apparatus for transferring a predetermined pattern, formed on a mask under illumination, onto a workpiece, comprising the optical apparatus according to claim 21.

27. (NEW) The exposure apparatus according to claim 13, wherein the optical surface has a curved optical surface.

REMARKS

Claims 1-20 are pending in this application and have been rejected. Amendments to claims 1-4, 6, 7, and 9-20 are presented herein. Claims 9-20 have been amended to improve form without changing substance. Claim 5 has been cancelled. Claims 21-27 are newly added in this response. The abstract has been amended to improve form. The specification has been